

Application No. 10/769,838
Reply to Office Action mailed 18 October 2005

LISTING OF CLAIMS

Claims 1-12. (cancelled)

13. **(currently amended)** A flat panel display comprising:
a front plate;
a rear plate;
a layer of liquid crystals and a TFT array layer, both interposed between the said front and rear plates; and
at least one thermal sensor integral to the TFT array layer ~~interposed between said front and rear plates~~ to provide temperature sensing of said layer of liquid crystals.
14. **(original)** A flat panel display according to claim 13, wherein said at least one thermal sensor is comprised of an array of diodes.
15. **(cancelled)**
16. **(currently amended)** A flat panel display according to claim 13 ~~15~~, wherein the ~~said~~ at least one thermal sensor is applied onto the ~~said~~ TFT array layer.
17. **(new)** The flat panel display of claim 13, wherein:
the thermal sensor provides a nominal 2.5 volt to 5.0 volt change in bias potential as the liquid crystal temperature changes from – 60 degrees Celsius to 100 degrees Celsius.
18. **(new)** The flat panel display of claim 13, further comprising:
an EMI layer interposed between the front and rear plates.

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19. **(new)** The flat panel display of claim 18, wherein each at least one thermal sensor lies under the EMI layer.
20. **(new)** The flat panel display claim 18, wherein the EMI layer is a black mask EMI layer.